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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,071	02/04/2004	Charles D. Huston	5863-00203	1712

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EXAMINER	
ISSING, GREGORY C	
ART UNIT	**PAPER NUMBER**
3662	

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/772,071	HUSTON ET AL.	
	Examiner	Art Unit	
	Gregory C. Issing	3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 21-40 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 21-40 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 20040802.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The IDS filed 8/02/04 is acknowledged and considered to the extent that they have been previously considered in a prior application. It is noted that the relevancy of a majority of the cited documents is minimal and not directed to the claimed invention. All of the cited references below with the exception of Bonito et al have been previously cited in the parent applications.

2. Claims 22, 23, 30 and 31 are objected to because of the following informalities: the language "including the step of determining" is objected to since it lacks a proper antecedent basis, i.e. there is no previous step of determining if the remote receiver is moving; the claim should read "including a step of determining." This same objection exists in claims 30 and 31. **Appropriate correction is required.**

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 32-40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "a database storing a set of user-defined advertising locations" is not supported by the disclosure as originally filed. Who is the user? How is the set defined?

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 37 and 40 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language "a set of user-defined advertising locations" is not clear in claim 32.

It is not clear what the scope of claim 37 is. Does this merely reflect the passage of information from the processor to the display? The use of a transmitter in the apparatus for communication of messages to the display is therefore not understood.

Claim 40 is indefinite since it is dependent upon claim 32 yet refers to language in claim 39 "said activity." It appears that claim 40 should be dependent upon claim 39, otherwise there is an improper use of antecedent basis.

7. Claims 21, 25, 27, 30, 32, 33, and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al in (5,056,106) view of Fukushima et al (5,270,936), Takahata et al (JP 3-134715), and Dudley (5,326,095).

Wang et al teach a golf course ranging and direction finding system using spread spectrum radiolocation techniques comprising a remote unit positioned on the golf course which determines position and displays information in the form of distance and direction between determined and database-stored target points. Figures 4 and 5 show the remote unit comprising processor and memory 16, receiver 20 for received information and a display interface. Wang et al differ from the claimed subject matter since the radiolocation system is terrestrial-based as opposed to the claimed GPS. Fukushima et al teach a simplified navigation apparatus which also displays distance and direction information to a target based upon the coordinate data at the current position and stored target point data, and which further shows the use of GPS satellites to determine the current position. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wang et al by substituting GPS satellites for the terrestrial reference transmitters in view of Fukushima et al and thereby provide a golf ranging/direction finding system using a portable device that is small in size, low in cost, and easy to use and also reduce the cost of the system by eliminating the need to install antenna sites on the grounds of the course since the satellites' signals are available globally and are available to an unlimited number of users simultaneously. Takahata et al is further cited as a supplementary teaching of the obviousness of using GPS on a golf course and thereby provides an additional motivation to combine the teachings of Wang et al and Fukushima et al. Thus, as has been already decided by Board Decisions, the combination of Wang et al in view of Fukushima et al and Takahata et al teach the conventionality of using GPS as a means for determining position on a golf course.

The combination does not show the particulars of displaying advertising messages when the golfer position, as determined from GPS, is at one or more predetermined advertising locations stored in a database.

Dudley discloses a golf information system including determination of golf cart position, distance to features on the golf course, communication of information with a club house for course management (Figure 14, col. 3, lines 1-4 and col. 10, par. 1), and position-based advertisement message display at particular locations on the course (col. 2, par. 1 and col. 7, par. 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the golf computer system of the combined references of Wang et al in

view of Fukushima et al and Takahata et al by including position-based advertisement message display to the golfer in view of the teachings of Dudley by using the determined position to retrieve the advertisement message from a storage memory and thus provide the golf course with additional revenue.

8. Claims 26, 28, 29, 34, 35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al in (5,056,106) view of Fukushima et al (5,270,936), Takahata et al (JP 3-134715), Dudley (5,326,095), and further in view of Bonito et al (WO 88/00487).

The combination does not show some of the particulars of the claimed golf display device.

Bonito et al teach a golf computer and the conventional features found therein including graphical displays of the features and holes of the golf course, a light pen for marking points on the display, and entering and displaying scores.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined references by including display of conventionally desired information on a golf course such as graphical layouts and scores, as taught by Bonito et al as well as any other desired information, such as an ordering page in view of the teachings of Bonito et al to provide a golf computer for use on a golf course for providing a wide range of information for a golf player during the game.

9. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al in (5,056,106) view of Fukushima et al (5,270,936), Takahata et al (JP 3-134715), Dudley (5,326,095), and further in view of either one of Hurn or RTCM.

The combination does not show the use of differential GPS.

Each of Hurn and RTCM Recommended Standards for Differential NAVSTAR GPS Service teach that it is well-known that the accuracy of the GPS solution can be increased using differential GPS. Since it is well known that "the ultimate in accuracy" is achieved by the use of differential GPS, (see Hurn Chap. 7, or RTCM, 2.1 and 3.1), and it is further well-known that in the game of golf, accurate distance between the golf ball and golf hole is important, see for example applicants' specification "Description of the Prior Art", it would have been obvious to one having ordinary skill in the art to further modify Wang et al in view of Fukushima et al,Takahata et al and Dudley by incorporating differential GPS as opposed to merely GPS and thereby achieve an even more accurate determination of position and subsequently distance/direction information as shown by either one of Hurn or RTCM.

10. Claims 26, 28, 29, 34, 35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al in (5,056,106) view of Fukushima et al (5,270,936), Takahata et al (JP 3-134715), Dudley (5,326,095), and further in view of Paul.

The combination does not show some of the particulars of the claimed golf display device.

Paul teach a golf computer and the conventional features found therein including graphical displays of the features and holes of the golf course, ordering beverages, and entering and displaying scores.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined references by including display of conventionally desired information on a golf course such as graphical layouts and scores, as well as any other desired information, such as an ordering page in to provide a golf computer for use on a golf course for providing a wide range of information for a golf player during the game in view of the teachings of Paul.

11. Claims 21-25, 27, 30, 32, 33, and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al in (5,056,106) view of Fukushima et al (5,270,936), Takahata et al (JP 3-134715), and Dimitiriadis et al (5,664,948).

The teachings and differences between the claims and the combination of Wang et al in view of Fukushima et al and Takahata et al are set forth above.

Dimitiradis et al teach the conventionality of providing both position and condition-based advertisement message presentation wherein a GPS-determined position (80) and optionally a condition (440b), is compared to a database resource 90 having advertisement messages correlated with advertisement locations and/or times and thereby provide an efficient delivery of advertisements at reduced costs.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the golf computer system of the combined references of Wang et al in view of Fukushima et al and Takahata et al by including position/condition-based advertisement message display to the golfer in view of the teachings of Dimitriadis et al by using the determined GPS position to retrieve advertisement messages from a storage memory at select advertisement locations and thus provide the golf course with additional revenue. Additionally, in view of the condition-based provision, it would have been obvious to display the advertising messages under the condition of whether or not the apparatus is moving or not moving, such as advertising for restaurants when moving away from the 18th hole or providing advertisements for clothing or equipment while the golfer is detected to be stationary and waiting for a group ahead of them to finish a hole, thus not distracting the golfer while driving.

12. Claims 26, 28, 34, 35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al in (5,056,106) view of Fukushima et al (5,270,936), Takahata et al (JP 3-134715), Dimitriadis et al (5,664,948), and further in view of Bonito et al (WO 88/00487).

The combination does not show some of the particulars of the claimed golf display device. Bonito et al teach a golf computer and the conventional features found therein including graphical displays of the features and holes of the golf course, a light pen for marking points on the display, and entering and displaying scores.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined references by including display of conventionally desired information on a golf course such as graphical layouts and scores, as taught by Bonito et al as well as any other desired information, such as an ordering page in view of the teachings of Bonito et al to provide a golf computer for use on a golf course for providing a wide range of information for a golf player during the game.

13. Claims 26, 28, 29, 34, 35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al in (5,056,106) view of Fukushima et al (5,270,936), Takahata et al (JP 3-134715), Dimitriadis et al (5,664,948), and further in view of Paul.

The combination does not show some of the particulars of the claimed golf display device.

Paul teach a golf computer and the conventional features found therein including graphical displays of the features and holes of the golf course, ordering beverages, and entering and displaying scores.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined references by including display of conventionally desired information on a golf course such as graphical layouts and scores, as well as any other desired information, such as an ordering page in to provide a golf computer for use on a golf course for providing a wide range of information for a golf player during the game in view of the teachings of Paul.

14. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al in (5,056,106) view of Fukushima et al (5,270,936), Takahata et al (JP 3-134715), Dimitriadis et al (5,664,948), and further in view of either one of Hurn or RTCM.

The combination does not show the use of differential GPS.

Each of Hurn and RTCM Recommended Standards for Differential NAVSTAR GPS Service teach that it is well-known that the accuracy of the GPS solution can be increased using differential GPS. Since it is well known that "the ultimate in accuracy" is achieved by the use of differential GPS, (see Hurn Chap. 7, or RTCM, 2.1 and 3.1), and it is further well-known that in the game of golf, accurate distance between the golf ball and golf hole is important, see for example applicants' specification "Description of the Prior Art", it would have been obvious to one having ordinary skill in the art to further modify Wang et al in view of Fukushima et al, Takahata et al and Dimitriadis et

al by incorporating differential GPS as opposed to merely GPS and thereby achieve an even more accurate determination of position and subsequently distance/direction information as shown by either one of Hurn or RTCM.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is 703-306-4156. The examiner can normally be reached on Monday - Thursday 6:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 703-306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory C. Issing
Primary Examiner
Art Unit 3662

gci